

WHAT IS CLAIMED IS:

1. A method of automatically providing traffic information to a user, comprising:

tracking and storing travel pattern data of the user, the travel pattern data including a time at which a travel occurs,

analyzing the travel pattern data to predict a particular travel path traveled by the user at a particular time when the travel occurs; and

automatically determining traffic information along the particular travel path at or before the particular time at which travel is predicted.

2. The method according to claim 1, wherein the tracking and storing step comprises tracking and storing a start time, a day of the week, a start location, and an end location for each travel of the user.

3. The method according to claim 1, wherein the travel pattern data relates to travel by the user using a vehicle.

4. The method according to claim 1, wherein the tracking and storing step comprises receiving data from a position determining system.

5. The method according to claim 4, wherein the position determining system is a satellite based GPS system.

6. The method according to claim 2, wherein the start time is determined at a time of switching on the ignition, and an end time is determined at a time of switching off the ignition.

7. The method according to claim 6, wherein the switching on the ignition and the switching off the ignition is determined based on a key-on or key-off position of an ignition key.

8. The method according to claim 2, wherein the analyzing step comprises correlating pairs of start locations and end locations with a range of start times and/or a day of the week.

9. The method according to claim 8, wherein the analyzing step further comprises calculating a frequency of the correlated pairs of start locations and end locations with a range of start times and/or a day of the week.

10. The method according to claim 1, wherein the step of determining traffic information comprises communicating with a second vehicle along the particular travel path to receive traffic incident information from the second vehicle.

11. The method according to claim 1, wherein the step of determining traffic information comprises communicating with a second vehicle along the travel path to receive travel speed information from the second vehicle.

12. The method according to claim 10, wherein the second vehicle communicates with a third vehicle along the travel path to receive traffic incident information from the third vehicle.

13. The method according to claim 12, wherein the second vehicle and the third vehicle transmit crash information only if the traffic incident information is determined to be recent.

14. The method according to claim 13, wherein the traffic incident information is determined to be recent based in part on the type of road on which the traffic incident is detected or on the number of vehicles involved in the traffic incident.

15. The method according to claim 11, wherein communicating with the second vehicle is accomplished using short range communication.

16. The method according to claim 15, wherein the short range communication is Dedicated Shortwave Radio Communications (DSRC).

17. The method according to claim 1, wherein the automatically determined traffic information is displayed to the user on a display within the vehicle at or before the particular time or whenever the ignition switch is switched on.

18. The method according to claim 1, wherein the automatically determined traffic information is displayed to a user at a user accessible display at or before the particular time.

19. The method according to claim 18, wherein the user accessible display comprises one or more of a home computer, a mobile phone, a PDA, or a handheld device.

20. A system for automatically providing traffic information to a user, comprising:

a position determining system for tracking travel pattern data of the user, the travel pattern data including a time at which a travel occurs;

a storage unit for storing the tracked travel pattern data;

a processing unit that analyzes the travel pattern data to predict a particular travel path traveled by the user at a particular time when the travel occurs; and

a short range communication unit that automatically determines traffic information along the particular travel path at or before the particular time at which the travel is predicted.

21. The system according to claim 20, wherein the tracked travel pattern data comprises a start time, a day of the week, a start location, and an end location for travel of the user.

22. The system according to claim 21, wherein the tracked travel pattern data relates to travel by the user using a vehicle.

23. The system according to claim 20, wherein the position determining system comprises a GPS receiver that communicates with a satellite based GPS system.

24. The system according to claim 21, wherein the start time is determined at a time of switching on the ignition, and an end time is determined at a time of switching off the ignition.

25. The system according to claim 21, wherein the processing unit analyzes the travel pattern data by correlating pairs of start locations and end locations with a range of start times and/or a day of the week.

26. The system according to claim 25, wherein the processing unit further calculates a frequency of the correlated pairs of start locations and end locations with a range of start times and/or a day of the week.

27. The system according to claim 20, wherein the short range communication unit determines traffic information by communicating with a second vehicle along the particular travel path to receive traffic incident information from the second vehicle.

28. The system according to claim 20, wherein the short range communication unit determines traffic information by communicating with a second vehicle along the particular travel path to receive speed information from the second vehicle.

29. The system according to claim 27, wherein the second vehicle communicates with a third vehicle along the travel path to receive traffic incident information from the third vehicle.

30. The system according to claim 29, wherein the second vehicle and the third vehicle only transmit traffic incident information that they have determined to be recent.

31. The system according to claim 30, wherein the traffic incident information is determined to be recent based in part on the type of the road

on which a traffic incident is detected or the number of vehicles involved in the traffic incident.

32. The system according to claim 21, wherein the short range communication unit comprises a Dedicated Shortwave Radio Communications (DSRC) unit.

33. The system according to claim 20, further comprising a display unit in the vehicle for displaying the automatically determined traffic information at or before the particular time or when the ignition switch is switched on proximate to the particular time.

34. The system according to claim 20, further comprising a display unit for displaying the automatically determined traffic information at or before the particular time at a user accessible device.

35. The system according to claim 34, wherein the user accessible device comprises one or more of a home computer, a mobile phone, a PDA, or other handheld device.

36. A system for automatically providing traffic information to a user, comprising:

position determining means for tracking travel pattern data of the user, the travel pattern data including a time at which a travel occurs;

storage means for storing the tracked travel pattern data;

means for analyzing the travel pattern data to predict particular travel path traveled by the user at a particular time when the travel occurs; and

communication means that automatically determines traffic information along the particular travel path at or before the particular time at which the travel is predicted.

37. A computer readable medium having program code recorded thereon that, when executed, causes a processor to perform steps comprising:

tracking and storing travel pattern data of a user, the travel pattern data including a time at which a travel occurs;

analyzing the travel pattern data to predict a particular travel path traveled by the user at a particular time when the travel occurs; and

automatically determining traffic information along the particular travel path at or before the particular time at which travel is predicted.